154. Numenius arquata (Linn.).

The query can be removed from my former list (Ibis, 1897, p. 106), as we both saw and heard Curlews at Krasnovarsk and Yeniseisk.

157. *LARUS CANUS Linn.

A Common Gull's nest was found, placed on the top of a stump about 12 feet high.

162. *Stercorarius crepidatus (Banks).

No Skuas of any kind appeared to be nesting except a pair of Richardson's Skuas which had one egg at Golehika.

167. *Colymbus arcticus Linn.

In the forest region the Black-throated Diver is more numerous than the Red-throated Diver.

168. Podiceps Griseigena (Bodd.).

Three Grebes were seen at Yeniseisk by Peck, which he thinks were Red-necked Grebes.

XXXIV.—Results of an Ornithological Journey through Colombia and Ecuador. By Walter Goodfellow, F.Z.S.

[Continued from p. 319.]

Fam. TANAGRIDÆ.

59. Procnias tersa (L.).

A series of adult males and females and immature males from Santo Domingo and Gualea, W. Ecuador, must be referred to the subspecies P. occidentalis, and those we collected at Archidona, at the foot of the Eastern Andes, to P. tersa typica. The latter are of a decidedly deeper blue, and not so distinctly barred about the sides of the abdomen, while the tail is blacker and less edged with blue on the upperside. The female is of a much yellower green than in the Western form. Owing to their protective colouring, they are less often seen than the males. They frequent the open clearings around the huts, and I never once saw them in the forests. At Santo Domingo they eat a hard green fruit, like an English sloe in size and shape, and it seems wonderful how they can swallow anything so large.

They also eat the young green shoots from some undetermined bush or plant.

60. EUPHONIA NIGRICOLLIS (Vieill.).

Eight males and one female from Guápalo, near Quito (8100 feet), and from the western side of Pichincha at about the same altitude. I was told that they but rarely come quite up to Quito, while they are only occasional visitors to Guápalo. They are generally met with in small flocks, and keep to the highest trees. One of our specimens is orange over the nostrils.

61. Euphonia Rufiventris (Vieill.).

A male from the mouth of the Coca River, Upper Rio Napo, E. Ecuador. A skin in the British Museum, collected by Buckley, must be labelled "Intaj" by an error, as it is unlikely that a bird found down on the Napo should also be found high up on the Pacific side of the Andes.

62. Euphonia saturata Cab.

Two males from Archidona, Eastern Ecuador, shot in the forest.

63. Euphonia xanthogastra Sund.

Nine males and five females from Santo Domingo and Gualea, W. Ecuador, where they were not rare in the forests. Small flocks of five or six were generally found hunting about together among the thick parasitical plants.

64. TANAGRELLA CALOPHRYS (Cab.).

A male from the mouth of the Coca, Upper Rio Napo, May 1899. Shot in the clearing near the hut. The bird is evidently rare in this locality, as the Indians seemed to be unacquainted with it.

65. Chlorochrysa bourcieri (Bp.).

Chlorochrysa bourcieri, Berl. et Tacz. P. Z. S. 1885, p. 77. Baeza, E. Ecuador (5000 feet). We only saw one pair, which were searching among the parasitical plants that thickly covered the tree-trunks on the edge of the forest. They appeared to have much the same habits as Calliste. Doubtless confined to the eastern side of the Eastern Andes.

66. Chlorochrysa phænicotis (Bp.).

A male from above Nanegal, Western Ecuador. As in the case of the preceding species, it was shot among the thick creepers which festooned a tall tree in the forest. Confined to the western side of the Western Andes. Evidently by mistake, Buckley stated that his skins came from Sarayacu and the Napo.

67. PIPRIDEA MELANOTA VENEZUELENSIS (Scl.).

One male from Pichincha (11,000 feet) in December, and two males from Papallacta, E. Andes (11,500 feet), in February. All our three skins appear to be those of males, yet the Pichincha bird has a mauvish-coloured head and rump and a deep blue-black mantle, while the Papallacta specimens have the head and rump of a more turquoise shade and the mantle bluish slate-colour, the outer margin of the wing-feathers being edged with the same. Iris in all cases bright red. The stomachs contained berries.

68. Procnopis vassori (Boiss.).

Nine adult males, three young males, and four females from Canzacota, Gualea, and Mindo, Western Ecuador, between 6500 and 8000 feet, and Baeza, Eastern Ecuador, 5000 feet. The birds are seen singly or in pairs, and frequent the higher trees, often in company with various species of *Calliste*. The stomachs of several contained little but insects, in the case of those from Mindo only berries. The females and young males are more dingy.

69. Calliste yeni (Lafr. & D'Orb.).

Two males from the Coca, Rio Napo, and Iquitos, Upper Amazon respectively. The Coca specimen was shot in the clearing by the hut in which we were staying, but the other was caught among the banana-trees in a small garden in the centre of the town of Iquitos. It was kept alive for several days tied to a perch by a string around its leg, and was brought to me after it died.

70. Calliste Rufigularis (Bp.).

Ten males and four females from Mindo, Intaj, and other

places in the Western Andes between 5000 and 7000 feet, though we procured only females at the lower altitude in August. I noticed the same facts with regard to other members of this genus, namely that we collected only males in one locality and females in another, and always at slightly different altitudes. The females of *C. rufigularis* are less marked with black on the breast than the males, while the markings are smaller and more confined to the upper breast, and are not continued so far down the sides. In two skins the throat is also of a lighter rufous.

71. Calliste aurulenta (Lafr.).

Nine males and three females from Santo Domingo and Intaj, W. Ecuador, between 600 and 1500 feet. They suddenly made their appearance after we had been at Intaj a few days, but all that we shot there in July were males, and the females were procured at Santo Domingo only. The latter appear to differ somewhat from the former in having the golden yellow of the rump and breast of a buffish hue, and the feathers of the back and wing-coverts edged with greenish yellow.

72. Calliste icterocephala (Bp.).

A large series from Santo Domingo, Gualea, and Intaj. They were generally to be found in the banana-plantations. The females are distinguishable by their greener heads, darker throats, and greener rump and underparts. Like all the other members of this genus, these are restless birds, always on the move and constantly uttering their sharp little call-notes.

73. CALLISTE VITRIOLINA (Cab.).

Our skins are from Gualea, Nono, and Intaj, W. Ecuador, and (two) from the Chota Valley, North Ecuador. The latter appear to be bluer on the back, wings, and tail. These birds were also numerous along the hedgerows around Popayán, South Colombia, and we obtained a good series of skins there, which were among those that we lost.

74. Calliste gyroloides (Lafr. & D'Orb.).

Nine adult males, one young male, and two females from

Canzacota, San Nicolas, and Gualea, from between 1000 and 6000 feet, but they were rare at the last-named place in September, and when we passed through it at the end of October we did not see a single example. An intelligent native of Canzacota told me that these birds only came there during August and September, and I think it is the ease with other members of the genus that they resort to higher altitudes only at certain seasons of the year. The young male is wholly dullish green, with a very slight coppery hue about the head. The females have paler blue breasts, slightly mixed with green, the rump greenish blue, and the head washed with green. This species frequents the lower trees and bushes.

75. CALLISTE BOLIVIANA Bp.

One male and one female from the Rio Tiputini, an affluent of the Napo. They were shot in the clearing near the hut, on the same tree, on two consecutive evenings just before dusk.

76. Calliste Ruficervix (Prév.).

Four adult males, one young male, and three females from San Nicolas, Intaj, and the neighbourhood, W. Ecuador. This is another *Calliste* which frequents bushes and low trees. The female is slightly duller on the crown.

77. Calliste nigriviridis (Lafr.).

Of these birds we evidently have two forms in our series—a bluish-green variety, which we found confined solely to the western or Pacific side of Ecuador, and a yellowish-green variety, confined to the eastern or Amazonian side. Placed together they seem very distinct, and ought, we think, to be divided, but in the British Museum they are classed together. Of the blue variety we obtained five males and three females from Canzacota and Western Pichincha (6500 to 8000 feet), and of the yellow variety three males and two females from Baeza (about 5500 feet). The respective females are not quite so bright as the males, and have more black on the head, while they are paler about the vent and under tail-coverts. In both localities we found them inhabiting high trees.

78. Calliste nigricincta (Bp.).

We met with only one male of this lovely Tanager, which we shot at the Rio Tiputini, running into the Napo, in the same tree and at the same time as the male of *C. boliviana*.

79. Calliste Cyaneicollis (Lafr. & D'Orb.).

Two males from Baeza, E. Ecuador (5500 feet). Shot in the top of a high tree.

80. CALLISTE LABRADORIDES (Boiss.).

Two males from Gualea, W. Ecuador (5000 feet). We found this species consorting with C. venusta.

81. Calliste parzudakii (Lafr.).

One male and two females from Baeza, East Ecuador, to which quarter this species is confined. The female has comparatively little red on the face and yellow on the nape, and looks altogether duller. This bird was found frequenting the tops of tall trees in the forests.

82. CALLISTE LUNIGERA (Scl.).

This is the western representative of the preceding bird, and we secured a large series of individuals from Canzacota, Gualea, and the lower western slopes of Pichincha, where they frequented the higher trees on the more open parts of the mountain-sides. The females have the head of a clearer yellow than the males, and no orange colour about the forehead. A young male has the throat greenish grey, the head, ear-coverts, and rump dingy green, and a slight golden hue on the forehead. Like all other members of the genus inhabiting the mountainous regions, this species was only to be met with in the early hours of the morning. Local name, "El terciopelo."

83. CALLISTE VENUSTA (Scl.).

Four males and two females from Canzacota, West Ecuador (6500 feet), and Bacza, East Ecuador (5500 feet). This was the only *Calliste* we found on both sides of the Andes without any change in the plumage; but I see that I recorded in my notes, when skinning them, that those from the western side had the iris brown (the usual colour

throughout this genus), while those from the eastern side had it dark grey. The females have the vent more fawn-coloured than the males, and the same colour extends up the centre of the breast.

84. CALLISTE CYANOPYGIA (Sel.).

Nine adult males, three young males, and three females from Canzacota, Gualea, and the western side of Pichincha, at altitudes of from 6000 to 8000 feet. Found in high trees on the more open parts of the mountain-slopes. The females are much duller than the males, and have the under tail-coverts dark green, edged with pale greenish yellow, and in one skin with light fawn; they have also less gold on the shoulders. Young males resemble the females, but have brighter golden shoulders.

I believe this species to be undoubtedly confined to the western side of the Andes.

85. Iridornis dubusia (Bp.).

Three males and two females from the western side of Pichineha and Corazón, at altitudes of about 7500 feet, seen singly or in pairs. The females have slightly more black on the forehead than the males, and also have the under tail-coverts rufous. Iris dark red.

Here again I think Buckley's skins in the British Museum are wrougly localized, for I cannot believe it possible that this bird is found also in the hot forest-land of the Napo. We certainly never came across it there. Very many of Buckley's skins are merely labelled "Quito," which is most misleading, while "Sarayacu" figures as the locality for all birds from the eastern side, irrespective of altitude, as well as for many which are not found there.

86. Pecilothraupis lunulata (Du Bus).

A large series of this Tanager from Pichincha and the environs of Quito, West Ecuador, and Papallacta, East Ecuador, where they range from 9000 to 11,500 feet. During November and December, when many kinds of berries were ripe on the mountain-slopes above Quito, these birds were

remarkably abundant. They sat on the topmost twigs, and, if disturbed, appeared to drop off suddenly into the bush below.

87. PECILOTHRAUPIS PALPEBROSA (Lafr.).

Five males and two females from Papallacta, Eastern Andes (11,500 feet), to which range they are probably confined; for we met with none in West Ecuador. The two females are scarcely so blue on the rump as the males. This species was generally found in the same trees as *Heliochera rubrocristata*.

88. BUTHRAUPIS CUCULLATA (Jard.).

A good series of this bird was obtained on both sides of the Andes, at altitudes of from 9000 to 11,500 feet. The western was the only side of Pichincha on which we saw them, but they were more numerous at Papallacta. They have a very harsh call-note, and were generally met with in the company of the following species, *B. chloronota*. Iris bright red.

89. Buthraupis Chloronota (Sel.).

Four males and one female from both Cordilleras, at the same altitudes as the preceding species. It was impossible to tell the call-note of one from the other. Although we explored the Volcano of Pichincha so thoroughly on every side, we only met with these birds (and many others) on the western slope. The nature of the vegetation is very different on that side from what it is on the other three, and this fact probably accounts for numbers of birds frequenting that part of the mountain only. The female is blacker about the forehead than the male.

90. Compsocoma victorini (Lafr.).

A series from various localities along the Western Andes at altitudes of from 9000 to 12,000 feet.

91. Compsocoma sumptuosa (Less.).

This still handsomer species we found rather common at Papallacta, on the Eastern Andes, in February, and we procured about a dozen specimens during our stay there. They seemed to feed entirely on berries and fruit. Iris reddish brown,

92. Compsocoma notabilis (Jard.).

One male, apparently of this species, was obtained on the lower part of the western side of Pichincha, at an altitude of about 7000 feet.

93. Dubusia tæniata (Boiss.).

Three males from Pichincha (11,000 feet) and one female from Papallacta, East Ecuador, which has the rump dark green. These birds make a loud chattering noise. Iris bright red.

94. Tanagra cœlestis (Spix).

Our specimens were procured at Archidona at the foot of the Eastern Andes, which was the only place in the Napo district where we met with them. We did not see any more until we reached Pará, at the mouth of the Amazon, where some were flitting about among the palms in the centre of the city. They looked to me to be of the same species, having white shoulders, which are very conspicuous when the birds are flying. They have quite a sweet song, and I often heard them singing in the Chonta palms around our hut at Archidona. They are generally found in pairs, and keep to the higher trees.

95. Tanagra cana Sw.

Common in the hot forest-regions of Western Ecuador, at Santo Domingo, Guanacillo, and other places, where they frequent the banana-plantations and the fruit-trees around the huts. Specimens from the foot of the hills seem to be less blue than those from farther down into the forests. Local name, "Azulejo."

96. Tanagra Palmarum, Max.

The subspecific term 'violilavata,' of Berlepsch and Taczanowski (P.Z. S. 1883, p. 546), probably applies to the West Ecnadorian form of this species, of which we obtained many examples in the clearing at Santo Domingo; but those we shot at Archidona, at the foot of the Eastern

Andes, were probably typical *T. palmarum*. There is an obvious difference between them, those from the Amazonian side being of a duller violet, and having the head yellowish green. These birds are tame in their habits, and frequent the vicinity of the huts.

97. Tanagra darwini (Bp.).

Two specimens of this species were shot in the gardens of the British Consulate at Quito, where they are occasionally met with. They come up from the "quebrada" of Guápalo during December and January to feed on the seeds of various flowering-trees, and are said to commit great damage in the gardens. Their call-note is beautifully clear, and resembles a long drawn-out whistle, going up the seale and then slowly descending. This is followed by a loud cry of "Guarichi" uttered three times in succession. Hence the bird is locally called "Guarichi."

98. TANAGRA CYANOCEPHALA (Lafr. & D'Orb.).

One male from Gualea, West Ecuador, in August. So far as I can remember, the specimens collected around Popayán in Colombia belonged to this species. If so, we only met with it in these two localities, and we found it rather more numerous in Colombia than in Ecuador, but by no means common anywhere.

99. RHAMPHOCŒLUS NIGRIGULARIS (Spix).

A male and female killed at one shot at the Coca, Rio Napo, in June. These birds were not common there, but much lower down the river, at the mouth of the Tiputini, I saw from the platform of our hut a flock of about thirty settle for a while on the tops of some bushes not far off, two nights in succession, just about sunset. The female is brownish on the black parts, and has the searlet not quite so intense as the male. Surely it is a mistake to say that this species ranges to Western Ecuador, as is stated in the British Museum Catalogue (xi. p. 172).

100. Rhamphocelus Jacapa (L.).

Females of this species were fairly numerous at Archidona, and males only at the Coea, lower down the river. It

frequents fruit-trees in the Indian clearings. The young males can be distinguished from the females by being more red, and by having faint white tips to the tail-feathers. They were in full moult at the Coca in May, and it was difficult to get any in good plumage.

101. Rhamphocœlus icteronotus Bp.

Confined to the Western side, and very numerous around the huts at Santo Domingo, where they were still breeding in October in the orange-trees, about eight feet from the ground; but the foliage was so thick and so prickly, and the nests were so far in, that it was impossible to get at them without cutting down the trees, which their owners would not let us do. I satisfied myself that one nest belonged to a pair the male bird of which was not yet in complete adult plumage. My very young males differ from the females in having the under tail-coverts brownish black, very slightly tipped with yellow, while the latter have them wholly yellow. Local name, "Plataneros."

102. Pyranga æstiva (Gm.).

Three males and one female from Canzacota, West Ecuador (6500 feet), Quito (10,000 feet), and Baeza, East Ecuador (5500 feet). Our Consul at Quito told me that he had never seen more than three at that altitude during the thirty years he had lived there. The specimen we shot in the garden during our stay at the Consulate had been in the neighbourhood for several days, but was very shy and tried to conceal its bright coat in the trees as much as possible.

103. Eucometis Cassini (Lawr.).

One male, from Santo Domingo, shot in the forest in October.

104. Tachyphonus Luctuosus Lafr. & D'Orb.

Three males from San Nicolas, West Ecuador, and two from the Coca, Rio Napo, East Ecuador.

105. Tachyphonus surinamus (L.).

One male from near the mouth of the Coca, where this bird frequents the undergrowth on the edge of the forest.

106. Nemosia guira (L.).

A male from Archidona, East Ecuador, in April.

107. Thlypopsis ornata (Scl.).

Nemosia ornata, Scl. et Salv. Nomencl. p. 24.

One male and one female from Mindo (about 7000 feet), on the lower western side of Pichincha.

108. Sericossypha albicristata (Lafr.).

Lamprotes albocristatus, Scl. et Salv. Nomencl. p. 22.

Two males and a female shot in March at Baeza, on the Eastern Andes (5500 feet), to which side they are entirely confined, and where they appear to be not at all common, for none of the few natives of the place seemed to have seen them before. We came across a flock of about a dozen. The female had the throat dull claret-coloured, and one male had the throat of a much brighter red than the other, being evidently an older bird. So far as I could see the other birds in the flock, there appeared to be one or two that had little or no white on the head. They were feeding on the berries of a fairly low tree.

109. Chlorospingus semifuscus (Scl.).

Four males and two females of this species were collected on both sides of the Andes at altitudes of from 7000 to 11,500 feet. They were generally met with singly, and except at Papallacta, where we shot two, were all from different localities and elevations. They frequented the tops of the higher trees, as did all the members of this genus we met with.

110. Chlorospingus atripileus (Lafr.).

One male and one female from the west side of Pichincha (8000 feet).

111. Chlorospingus rubrirostris (Lafr.).

A single male from Papallacta (11,500 feet), Feb. 1899. Bill yellowish red, iris brown.

112. Chlorospingus nigrifrons Lawr.

Chlorospingus superciliaris nigrifrons, Scl. Cat. B. xi. p. 247. Six males and four females from Milligalli, Gualea, and Mindo, West Ecuador (5000 to 7000 feet).

113. CHLOROSPINGUS FLAVIGULARIS (Scl.).

Three males and two females from Gualea, Milligalli, and Canzacota, West Ecuador (6000 to 8000 feet). The females have the crown and sides of head dark greyish, the upper throat fawn, and the lower throat greenish yellow right across, and not divided as in the male. The iris is dark reddish brown.

114. UROTHRAUPIS STOLZMANNI (Tacz. & Berl.).

Urothraupis stolzmanni, Tacz. et Berl. P. Z. S. 1885, p. 83, pl. viii.

At Papallacta, Eastern Andes (11,500 feet), we shot two males and a female of this Tanager. One male has the shoulders rather pale grey, but the other, which is probably younger, has them dull greenish-grey, and the wings a little shorter. The female has the wing-coverts edged with greenish grey, the throat and breast not so white as in the males, and the vent and sides washed with dull green.

115. BUARREMON ASSIMILIS (Boiss.).

Eight males and four females from Pichincha and Papallacta, on both ranges of the Andes, at about 11,500 feet. These birds seem to live mostly on the ground, and run about under the bushes. One female from Papallacta has the sides of the mandible yellow, and the head very much flecked with olive-green. Iris dull red. Local name at Quito, "Monjas."

116. BUARREMON BRUNNEINUCHA (Lafr.).

One male from the west side of Corazón (about 7000 feet), in September.

117. Buarremon leucopterus (Jard.).

Two males and two females from Pichincha (10,000 feet). The females have fawnish-grey thighs and vents, and the heads less clearly marked. Not common in this locality.

118. Buarremon Pallidinucha (Boiss.).

Four males and two females from Papallacta, East Ecuador. In pairs in February, and in breeding condition. The females have the nape dull white and the crown more brownish yellow than the males.

119. BUARREMON SCHISTACEUS (Boiss.).

Six males and only one female from Papallacta. Also in breeding condition in February. The female has the white markings on the primaries much duller than has the male.

120. Buarremon spodionotus (Scl. & Salv.). Buarremon spodionotus, Scl. Cat. B. xv. p. 264.

Six adult males and one young male from Papallacta, East Ecuador, in February, and two males and one female from Corazón and Pichincha, West Ecuador (11,000 to 12,000 feet), in November and December. The young male from Papallacta is just changing its speckled for a yellow breast, and has the crown of the head and nape light brown, the mantle and rump being rusty slate-coloured. The two western males have the crown very pale, shading off into decided fawn-colour on the nape. The female is probably very young, and has the head black with only a few dingy fawn-coloured feathers down the nape.

121. ARREMON SPECTABILIS (Scl.).

One male from Santo Domingo, in October, and one female from San Nicolas, West Ecuador, in September. Sexes alike. Legs and feet yellow, bill yellowish red.

122. OREOTHRAUPIS ARREMONOPS Scl.

A male from below Mindo, West Ecuador (about 6000 feet). We shot another of these birds at a higher altitude, but it was stolen with other skins from a hut where we were staying. It was much paler coloured than the former, the feathers of the throat and breast being edged with brown instead of black, and the head blackish brown. The wings and tail were of the same rufous shade in both.

123. Cissopis leveriana (Gm.).

From Archidona and the mouth of the Coca, Upper Rio Napo, where individuals were by no means rare in the clearings around the Indian huts. They eat largely of small, hard, green buds, and invariably alight on the topmost twigs of the bushes where these grow. They were always in pairs, and were moulting heavily in May. It is very difficult to pass the head of these birds through the

neck when skinning them. The Indians of the neighbour-hood use the skins largely in their ornaments. In Quito, where the people know these birds from seeing preserved specimens, they call them "Dominicos."

124. PSITTOSPIZA RIEFFERI (Boiss.).

Eight males and five females from Canzacota, West Ecuador (6500 feet), in August and September, and below Bacza, East Ecuador (5000 feet), in March. The females on the whole are a shade lighter in colour, have less blue around the base of the bill, and the vent also less rufous. In life the bill, legs, and feet are bright coral-red, and not orange or yellow as stated in the British Museum Catalogue (xi. p. 281). The bright green plumage fades very much after the skin has been kept for a time. These birds live in pairs in the high trees, and their curious call-note is easy to imitate, so that if one is shot, its mate can be attracted back to the same spot. They feed on berries of a juicy nature.

125. Saltator magnus (Gm.).

Three males from Santo Domingo, in October, and two females from San Nicolas, in September. They frequent the fruit-trees and the banana-plantations. The females seem to be greyer about the crown and sides of head than the males, and much lighter down the centre of the breast.

126. SALTATOR SUPERCILIARIS (Spix).

From the Coca, Upper Rio Napo, in May and June. They were numerous at times in the fruit-trees around the huts, and were generally found feeding in the company of *Rhamphocalus jacapa*. They have a loud, sweet song, and, when uttering it, always sit on the highest twigs.

127. Saltator albicollis (Vieill.).

Two males and one female from below Gualea (West Ecuador), in July and August.

128. Saltator atripennis Scl. One male from Gualea, in August.

Fam. FRINGILLIDÆ.

129. PHEUCTICUS CHRYSOGASTER (Less.).

A good series of adult and immature birds was procured from Quito and the Chillo Valley. They only come up to Quito during the months of November, December, and January, when they do considerable damage in the gardens to buds and young shoots which they appear to pull off the trees out of pure wantonness. They feed largely on the seeds of various acacias, both green and ripe. They have loud and agreeable notes, and their flight is clumsy and short. They frequent the Chillo Valley all the year round, and I often saw a dozen or more together pecking about on the old stone walls around the village of Pifo. I found one of their nests at this place in October. It contained two young, and was built on the lower branches of an acacia-tree. Immature males and females always seemed to predominate in Quito. and it was quite rare to see an adult male there. It is easy to distinguish the young males from the females; the latter, for instance, are much darker on the breast, and have the under tail-coverts pale cinnamon, whereas all the former that we shot had them white.

130. Spermophila ophthalmica (Scl.).

Very common at Santo Domingo in ctober, where during the midday hours they assembled in large flocks on the grass around the huts. Iris reddish.

131. Spermophila gutturalis olivacea (Tacz. & Berl.). Spermophila gutturalis olivacea, Tacz. et Berl. P. Z. S. 1885, p. 122.

As common as the last species, and always found feeding with it. If we fired into a flock we generally brought down about equal numbers of both kinds.

132. CATAMBLYRHYNCHUS DIADEMA Lafr.

Three males from the vicinity of Mindo, West Ecuador, about 7000 feet. We found them singly in the higher trees, and never saw but these three.

133. PAROARIA GULARIS (Linn.).

Not rare on the Napo near the mouth of the Coca, but not SER. VIII.—VOL. 1. 21

found above it; the range extends from that river to the Marañon. We never saw these birds away from the riverbanks, and they were generally sitting on the trees which overhung the water or flying along close to the surface. Iris dark reddish brown. Sides of the mandible yellow at the base.

134. Coryphospingus cruentus (Less.).

One female shot at Santo Domingo in the fruit-trees near the hut. The stomach contained what looked like grass-seeds.

135. Spodiornis Jardinii (Scl.).

One male from Milligalli, West Ecuador (6000 feet), in September.

136. Phrygilus unicolor (Lafr. & D'Orb.).

Five males and four females. This bird was fairly numerous around Quito, especially in the hedges on the El Egido plain to the north of the city. We also found it at Aloag, a village above Machachi, about 9500 feet.

137. Phrygilus ocularis Sel.

Found in the fields around Quito and the Chillo Valley, in small flocks, in November and December.

138. Phrygilus Alaudinus (Kittl.).

Met with in company with P. ocularis, but not so numerous.

139. CATAMENIA ANALOIDES (Lafr.).

Three males and two females from the environs of Quito and the Chillo Valley. These birds are often kept in cages in Quito, as they have a nice song. The young males seem to be greyer than the females.

140. CATAMENIA HOMOCHROA Scl.

Three males and one female. This bird is met with along the hedgerows in the vicinity of Quito. In November, when other members of the genus were in flocks, we found this species as a rule in pairs only among the thicker bushes and hedges.

141. ZONOTRICHIA PILEATA (Bodd.).

Common in Quito, where it takes the place of our domestic

Sparrow, and also in many towns of the central tableland. We found that it ranged up the Western Andes to just over 11,000 feet, and over the western side of them down to Milligalli (6000 feet); but we only saw three there altogether, and at no other place on the same side at anything like such a low altitude. I was told that the birds were occasionally enticed down by grain which falls from the sacks as the mules carry them from the highlands to the forests below. There were certain villages in the Chillo Valley where we never saw them, but they were plentiful around the tambo on the Tablon (11,750 feet), on the western side of the Eastern Andes. though unknown at Papallacta, 11,500 feet, over on the eastern side of the same range. Nor did we see any at Pedregal or in the Valle de Viciosa, on the Eastern Andes. I believe that they were the birds which were quite common at Popayán, Colombia (5825 feet). In Quito they were very tame, and frequently came into the rooms. They nested there under the tiles and among the creepers on the trees and walls. They have a sweet but rather melancholy song, and may often be heard singing on moonlight nights. They are seldom seen far away from the dwellings of man. I saw an apparently pure albino in Quito and several partial albinos, but did not secure any. Local name, "El Gorrión."

142. Embernagra Chrysoma Scl.
One male from Gualea, Western Ecuador.

143. Chrysomitris icterica capitalis Cab. Chrysomitris capitalis Sharpe, Cat. B. xii. p. 219.

A large series of adult and immature males and females from Quito and the Chillo Valley. At both places they congregated in large flocks in November, December, and January, and filled the air with their sweet song. In Quito they eat the seeds of most of the flowering plants in the gardens, but in the Chillo Valley they feed chiefly on grass-seeds.

144. Sycalis arvensis luteiventris (Mayen). Sycalis luteiventris Sharpe, Cat. B. xii. p. 383. We did not find this bird in Quito, but shot a few in the

environs, and in the Chillo Valley they were common and generally in flocks with the preceding species.

Fam. ICTERIDÆ.

145. CLYPEICTERUS OSERII Deville.

One female only from the Upper Rio Napo, near the mouth of the Coca, where this bird was not common. I had two males brought to me by the Indians, but they had kept them too long to be worth skinning.

146. OCYALUS WAGLERI (Gray & Mitch.).

We shot a large series of examples of this bird at Santo Domingo, Western Ecuador, where we found them not at all rare. They frequented the banana-plantations and did great damage to the ripe fruit. We also shot two in the depths of the forest, but as a rule they live chiefly in the open clearings. Some of their notes are very fine and liquid, and others are like the sound of gurgling water. Their flight exactly resembles that of a Toucan, and in the evening they assemble in flocks and retire for the night to the high trees on the edge of the forest. The whole of the bill is pale lemon-yellow. Iris pale blue in the male, and greyer in the female.

147. Ostinops cristatus (Gm.).

Six males but no females from the Coca, Upper Rio Napo, where they were fairly numerous in small flocks. Wherever we went the males of this genus always seemed more plentiful than the females. Indian name, "Manga."

148. Ostinops angustifrons (Spix).

Two pairs, also from the Coca. Seen in couples and always in the thick forests, whereas the other species seem to prefer the river-banks. The bill is black, with the base and tip yellow. Iris sky-blue, and rim of the eyelids red. Indian name, "Manga pana."

149. Ostinops decumanus (Pall.).

One male from the Coca. It had a large piece of the base of the bill broken away, which damage had evidently been sustained a long time previously. It was such a large hole that it was wonderful how the bird had been able to

swallow any food at all. Bill wholly lemon-yellow. Iris pale blue.

150. Ostinops alfredi (Des Murs). Ostinops alfredi Scl. Cat. B. xi. p. 318.

We shot a male and female of this species at Milligalli (6000 feet), and odd males at San Nicolas and Gualea at much lower elevations, all in West Ecuador. These two odd males are fully adult and are alike in every respect, but the pair from Milligalli differ from them in having the foreheads of a paler primrose-colour, and also a stripe of the same colour over the eyes. The San Nicolas and Gualea males show no trace of this, and their foreheads are of a darker yellow. The Milligalli male is but very little larger than the female, while the latter lacks the elongated feathers on the crown. In all cases the bills are deep chrome-yellow. The birds were nesting at Milligalli in September, and many of their long nests hung from one tree in inaccessible positions over the torrent. We met with them in the forests at San Nicolas in small flocks of seven or eight. They keep up a loud noise, which may be heard at a great distance. They have a peculiar pungent odour, which my skins still partially retain.

151. Cassicus persicus (Linn.).

A series from the Upper Napo, East Ecuador. They were nesting there in May and June, and on one tree I counted 62 of their hanging nests. They prefer tall trees standing well out in the clearings, or those on the edge that rise above the general forest-level. Each of the nests that I took contained five young, which varied considerably in size. Even before these are fledged they run up the inside of the nests to be fed at the opening at the top, and before they can fly they sit about on the outside, but rapidly vanish inside at the sight of a Hawk or any other large bird. In the young the black parts are of a rusty colour, with a strong yellowish hue about the lower part of the breast and thighs, which gives them an almost olive-green appearance. The bills of the adult birds are

pale lemon-yellow (not "white," as stated in the Brit. Mus. Cat.) and the iris is pale blue; but in the young the bill is grey, with a yellow tinge at the tip, and the iris is dark grey. The Ecuadorians call them "Culembras," but the Napo Indians called them "Chaupi mangas."

152. Cassicus affinis Sw.

From Baeza, E. Ecuador (5500 feet), but we did not meet with any below that place. They were in small flocks on the more open sides of the mountains. Bill pale yellow. I do not think it possible that this bird can be also found on the Western Andes, and the skin in the British Museum obtained by Buckley must be so labelled by mistake.

153. Cassicus leucorhamphus (Bp.).

Three males and two females. We constantly met with this species in small flocks during our first two days' walk after we left Bacza, but nowhere at a lower level. It also frequented the mountain-sides where the forests were less dense, and is undoubtedly found on the eastern side only.

154. Icterus croconotus (Wagl.).

A male and female from the Suno, Upper Rio Napo. We frequently saw pairs, but they seemed confined to the edge of the forests along the river-banks and places where bamboos grew. On the Coca, in June, I saw three of their nests in close proximity suspended from the tips of bamboos overhanging the water. The bare skin around the eyes is dark slaty-blue. Beautiful as the colour of these birds is in the skin, it is still more beautiful in life. I noticed that our specimens faded as soon as they began to dry, and turned more yellow. The Zapáro Indians called them "Palandra pisco," which was not very distinctive, for they applied the same name to other birds. It means Plantain-bird.

155. Amblycercus holosericeus (Scop.).

A male and female from the foot of the Eastern Andes, Upper Rio Napo. We also saw the birds about the mouth of the Coca River in May and June, but they were then moulting so heavily that they were not worth shooting. They were not common in any locality that we visited, were generally in pairs, and frequented the lower growth about the edges of the forests. Bill leaden horn-colour. Iris grey.

156. GYMNOMYSTAX MELANICTERUS (Vieill.).

A very young male from the Coca, Upper Napo, in June. It was brought to me alive, with one leg and a wing broken. The back is very brown, and still has down hanging to some of the feathers. The primaries and secondaries are yellowish brown on the outer margin. In life the bare skin around the eyes is flesh-colour, and the legs and feet are pinkish grey. Iris pale brown.

157. STURNELLA BELLICOSA De Fil.

A male from the vicinity of Chimborazo at an altitude of about 8000 fcet, where they seemed fairly numerous. They frequented stony regions, and I observed them turning over the small stones to look for insects underneath. They are common in captivity throughout the towns of Central Ecuador.

158. Cassidix oryzivora (Linn.).

A very large series, chiefly from Santo Domingo and San Nicolas, West Ecuador, collected in September and October; they were not met with at a higher altitude than about 3000 feet. During the first week or two of our stay at Santo Domingo we never saw one of them, then a large influx took place, and many could be observed all day and every day about the clearing, but never within the forest. They frequented the banana-plantations, and we often shot them while they were eating the ripe fruit. We also frequently saw them alone, and in the company of *Crotophaga ani*, sitting on the backs of the sleeping cattle or on the ground around them. At both Santo Domingo and San Nicolas they were called "Garapateros" (tick-eaters), and *Crotophaga ani* was called "Chamom."

When whistling they expand the thick feathers on the

neck like a ruff. The females are much smaller, and black, without the purple gloss. Iris yellow, but less bright in I found grasshoppers in the stomachs of three the young. examples.

Fam. Corvidæ.

159. Xanthura Turcosa (Bp.).

Seven males and four females from the west side of Pichincha and Mindo in November, Nanegal in July, and Papallacta, East Ecuador (11,500 feet), in February. They were more numerous on the Eastern Andes and went in larger flocks there. I found berries of various kinds in the stomachs, and also beetles. Mr. Hamilton shot one which had the egg of some small species in its bill, and I killed another which was eating a young bird. They have rather a harsh cry, and while on the Western Andes they were always in the highest trees and were decidedly shy; at Papallacta they frequented the bushes in the vicinity of the huts in flocks of four or five together. Local name, "Auroras."

160. XANTHURA INCAS (Bodd.).

Five males and one female from Baeza, Eastern Ecuador, and the small valleys below. They were in flocks of from twenty to thirty and frequented very high trees, keeping up an incessant chattering the whole time. The young have the nape much bluer than the adults, and the blue on the cheeks and forehead greenish. I believe that this species is the same as that we shot in the mountains above Popayán and around Pasto, in Colombia. It is found only on the eastern side of the Andes in Ecuador. Local name, "Pantanja."

161. Cyanocorax violaceus (Du Bus).

Two pairs from the Rio Suno, Upper Napo, which was the only locality where we saw them. They were in couples, in the tops of the high trees in the forests, and were moulting in May and June. The females seem to be more grey than the males. The stomach of one contained the remains of a small lizard.

[To be continued.]